

WHAT IS CLAIMED IS:

1. A method for using a computer to implement an auction of a set of first objects and one or more complementary second objects, at least one first object having a complementary second object, two or more bidders participating in the auction, the method comprising:

- a) initiating an auction by identifying available objects to bidders,
- b) inputting, into the computer, bids for first objects from bidders,
- c) determining, at the computer, based on the bids of step b), whether the auction should continue,
- d) repeating steps b) and c) until the auction is terminated,
- e) assigning the first objects to bidders based on the bids in force at the time the auction was terminated, and
- f) assigning a complementary second object to a successful bidder for a first object, based on the bids for the first objects.

2. The method of claim 1 where step f) occurs contemporaneous with steps a) –e).

3. The method of claim 1 wherein the prices for second objects are based on the prices of first objects as reflected in the successful bids.

4. The method of claim 1 wherein first objects are spectrum licenses for communication spectrum and second objects are related clearing rights for television transmission in the same or adjacent spectrum.

1 5. The method of claim 1 wherein step c) terminates an auction in the event no new bids were
2 submitted and wherein step c) also transmits new bidding information to bidders in the event the
3 auction is not terminated.

1 6. The method of claim 1 wherein step f) is limited to selected bidders.

1 7. The method of claim 1 wherein, preparatory to the auction initiated at step a), a related auction
2 is conducted, the related auction selecting a relation between a price of a first object and a price
3 of a complementary second object, the related auction comprising the steps of:

4 a1) providing information to bidders of the initiation of the related auction,

5 a2) receiving bids from bidders concerning the relation; and

6 a3) selecting a relation between the price of a second object and the price of a first object,
7 based on the bids of step a2).

1 8. The method of claim 7 further including selecting as participating bidders those bidders who
2 either bid at least the selected relation or who accede to the selected relation..

1 9. The method of claim 1 wherein only steps a) –e) inclusive are performed by or with the aid of
2 the computer.

1 10. The method of claim 1 wherein steps a) –f) are performed by or with the aid of the computer.

11. A method for using a computer to implement an auction of a set of licenses for communication spectrum and one or more complementary second objects, each second object comprising clearing rights related to a license, two or more bidders participating in the auction, the method comprising:

- a) initiating an auction by identifying available communication licenses to bidders,
- b) inputting, into the computer, bids for the communication licenses from bidders,
- c) determining at the computer whether to continue the auction, based on whether at least one new bid of step b) exceeded a minimum acceptable bid, and in the event the auction is continued, sending information to bidders respecting a minimum acceptable bid,
- d) repeating steps b) and c) until the auction is terminated,
- e) assigning the communication licenses to successful bidders based on the bids in force at the time the auction is terminated, and
- f) assigning to a successful bidder a related clearing right at a price related to the bid in force at the time the auction is terminated.

12. The method of claim 11 which includes assigning each clearing right to the successful bidder for the related communication license.

13. The method of claim 11 wherein only steps a) –e) are performed by or with the aid of the computer.

14. The method of claim 11 wherein steps a)-f) are performed by or with the aid of the computer.

1 15. The method of claim 11 wherein, preparatory to the auction initiated at step a), a related
2 auction is conducted, the related auction selecting a relation between a price of a clearing right
3 and a price of a related communication license , the related auction comprising the steps of:
4 a1) providing information to bidders of the initiation of the related auction,
5 a2) inputting to the computer bid information for the relation;
6 a3) determining at the computer, based on the bid information of step a2) to terminate the
7 auction unless at least one new acceptable bid was submitted wherein an acceptable bid is
8 considered larger than a preexisting bid, in the event the auction is not terminated sending
9 information respecting the highest bids for the relation to participating bidders as indicating bids
10 which are not acceptable, and
11 a4) in the event the related auction is terminated, selecting the relation as the highest bid
12 for the proportion of price of a clearing right and related communication license.

1 16. The method of claim 15 wherein only steps a1)-a3) and a) –e) are performed by or with the
2 aid of the computer.

1 17. The method of claim 15 wherein steps a1)-a4) and a)-f) are performed by or with the aid of
2 the computer.

1 18. A method for using a computer to implement an auction of a set of first objects and a set of
2 second objects, at least one first object having a complementary second object, at least one
3 second object having a complementary first object, two or more bidders participating in the
4 auction, the method comprising:

5 a) initiating an auction by identifying available objects to bidders,
6 b) inputting, into the computer, bids for first objects from bidders,
7 c) inputting, into the computer, bids for second objects from bidders, where an acceptable
8 bid for a second object is constrained by a bid for a complementary first object,
9 d) determining, at the computer, based on the bids of steps b) and c), whether the auction
10 should continue,
11 e) repeating steps b), c) and d) until the auction is terminated, and
12 f) assigning the objects to bidders based on the bids in force at the time the auction was
13 terminated.

1 19. The method of claim 18 wherein first objects are communication licenses and second objects
2 are clearing rights related to a communication license.

1 20. The method of claim 19 wherein an auction is terminated at step d) when no new acceptable
2 bids are received.

1 21. The method of claim 20 wherein an acceptable bid is a bid of greater price than a preexisting
2 bid.

1 22. A method for using a computer to implement an auction of one or more clearing rights
2 related to a first auction of communication licenses, where each clearing right is complementary
3 to a communication license, the first auction assigning the communication licenses to successful

4 bidders based on bids for the communication licenses, two or more bidders participating in the
5 first auction, the method comprising:
6 assigning a clearing right to the successful bidder for the complementary communication
7 license.

1 23. The method of claim 22 wherein, preparatory to the first auction of communication licenses a
2 further auction is conducted, the further auction selecting a relation between a price of a clearing
3 right and a price of a communication license, the related auction comprising the steps of:

4 a1) providing information to bidders of the initiation of the further auction,
5 a2) receiving bids from bidders concerning the relation; and
6 a3) selecting a relation between the price of a clearing right and the price of a
7 communication license, based on the bids of step a2), and selecting as participating bidders those
8 bidders who accede to the selected relation.

1 24. The method of claim 22 wherein the assigning step assigns a plurality of clearing rights, in
2 each case, to the successful participating bidder of the communication license.

1 25. The method of claim 22 which includes the preparatory steps of:

2 a) receiving a plurality of clearing agreements, each of the agreements concerning
3 television broadcasting rights or other encumbrances to one or more licenses for communications
4 spectrum,

b) manipulating the clearing agreements to create one or more separate clearing rights,
each of the clearing rights aligning, in location on the electromagnetic spectrum and in
geographic location, with the scope of one of the communications licenses, and
c) storing the results of step b) so that clearing rights and the associated clearing
agreements can be correlated.

26. The method of claim 25 which further includes conducting a further auction for selecting a
relation between a price of a clearing right and a price of a communication license, the further
auction includes the steps, of

d) providing information to bidders of the initiation of the further auction,
e) receiving bids from bidders concerning the relation; and
f) selecting a relation between the price of a clearing right and the price of a
communication license, based on the bids of step e), and selecting as participating bidders those
bidders who accede to the selected relation.

27. A method for using a computer to facilitate an auction of clearing rights, the clearing rights
corresponding to licenses for communications spectrum, two or more bidders participating in the
auction, the method comprising:

a) receiving a plurality of clearing agreements, each of the agreements concerning
television broadcasting rights or other encumbrances to one or more licenses for communications
spectrum,

7 b) manipulating the clearing agreements to create a plurality of separate clearing rights,
8 each of the clearing rights aligning, in location on the electromagnetic spectrum and in
9 geographic location, with the scope of a different one of the communications licenses

10 c) storing the results of step b) so that clearing rights and the associated clearing
11 agreements can be correlated.

1 28. The method of claim 27 wherein the manipulating step includes aggregating several
2 agreements into a single clearing right in the event a clearing agreement has a geographic scope
3 smaller than a communication license.

1 29. The method of claim 27 wherein the manipulating step includes partitioning a clearing
2 agreement into more than a single clearing right in the event the clearing agreement has a
3 geographic scope exceeding that of a communication license.

1 30. The method of claim 27 wherein the manipulating step includes aggregating several
2 agreements into a single clearing right in the event a clearing agreement has a geographic scope
3 smaller than a communication license and partitioning a clearing agreement into more than a
4 single clearing right in the event the clearing agreement has a geographic scope exceeding that of
5 a communication license.

1 31. The method of claim 27 which further comprises:

2 d) assigning to a successful bidder a clearing right aligned with the communication
3 license.

1 32. The method of claim 31 which further includes the steps preparatory to step d) of:

2 c1) conducting an auction of at least some of the communication licenses.